

IOWA Department of REVENUE

2009 Retailers Motor Fuel Gallons Annual Report

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Introduction

In 2006 the Iowa General Assembly enacted H.F. 2754, an act pertaining to the regulation of renewable fuels and energy and providing incentives for the installation of biofuels infrastructure and the promotion of biofuels sales. This legislation established a goal that 25 percent of all petroleum used in the formulation of gasoline be replaced by biofuels by the year 2020.

To measure the State's progress toward achieving this goal section 56 of the Act established new reporting requirements for motor fuel retailers (Iowa Code section 452A.33). The legislation made the Department of Revenue responsible for collecting the motor fuel sales information. In consultation with the Renewable Fuels Infrastructure Board, motor fuel retailers, and other interested parties, the Department established an annual reporting requirement by administrative rule (701—67.27).

Motor fuel retailers were required to file their first annual report for sales made during calendar year 2007. Annual reports are due to the Department by January 31st for each subsequent year. However, because there are no penalties imposed for not filing a report the information provided in this report does not reflect all retail motor fuel sales in the State.

Reporting Requirements

Motor fuel retailers are required to file either a paper copy or an electronic file of annual motor fuel sales by location. The reporting form (82-053a) requires retailers to provide information on retail gallons sold for the following fuel types:

- Gasoline (non-ethanol blend)
- Ethanol E10 blend (10 percent ethanol)
- Ethanol E85 blend (85 percent ethanol)
- Clear diesel (all blends)
- Dyed diesel (all blends)

The distinction between clear diesel and dyed diesel reflects whether the fuel is subject to State and federal road taxes. Dyed diesel fuel is not subject to road taxes and is sold for use in farm, construction, and other types of equipment that do not travel under their own power on public roads, except for short distances such as between farm fields.

For biodiesel additional detailed information is required for their sales of the following fuel blends:

- Clear B2 (2 percent biodiesel)
- Clear B5 (5 percent biodiesel)
- Clear B10 (10 percent biodiesel)
- Clear B20 (20 percent biodiesel)
- Clear Biodiesel Other
- Dyed B2 (2 percent biodiesel)
- Dyed B5 (5 percent biodiesel)
- Dyed B10 (10 percent biodiesel)
- Dyed B20 (20 percent biodiesel)
- Dyed Biodiesel Other

Finally, motor fuel retailers that do not provide biodiesel sales information by blend are required to provide information on the number of gallons of pure (B99 or B100) biodiesel they purchased during the year.

Statistical Summary for 2009

The Department identified 2,499 potential retailers of motor fuel to which it either mailed the annual reporting forms or contacted the corporate office. These locations were identified through information obtained from the Weights and Measures Bureau of the Iowa Department of Agriculture and Land Stewardship and from the Department's Motor Fuel Tax Section.

The Department received either forms or electronic files representing 2,372 (94.9%) of the locations. Replies for 102 of the locations indicated that no retail sales of any type of motor fuel were made during 2009. 2,270 locations reported retail motor fuel sales.

This report's primary focus is on biofuel sales. Of the reporting retail locations, 2,139 (94.2%) reported selling E10 blend motor fuel, 144 (6.3%) reported selling the E85 blend motor fuel, and 325 (14.3%) reported selling various blends of biodiesel. Biofuels sales by these locations are summarized below (and in Table 1):

Gasoline-Type Fuel Sales

During 2009, the amount of E10 (10 percent ethanol blend) motor fuel sold equaled 1,197.0 million gallons and the amount of E85 motor fuel sold equaled 5.9 million gallons. Combined both ethanol blends represented 82.0 percent of total gasoline-type motor fuel sales during the year. 95.7 percent of the 2,235 locations that sold gasoline-type motor fuels sold one or both of the types of ethanol blends.

Since some locations did not return the annual reporting form to the Department, statistics from the Department's Monthly Motor Fuel Tax Reports were used to judge the amount of underreporting for 2009. The statistics presented in the Monthly Motor Fuel Tax Reports reflect the amounts of taxable motor fuel shipped from terminals rather than sold at retail locations. Also, the Monthly Motor Fuel Tax Reports reflect tax payments for fuel shipments made during the prior month. Therefore, the period used for comparison with the 2009 Retailers Motor Fuel Gallons Annual Report includes the months from February 2009 through January 2010. During this period tax was paid on a total of 1,625.5 million gallons of gasoline-type fuels. In comparison, the annual reports reflect 1,467.7 million gallons of gasoline-type fuels, or 90.3 percent of the amounts obtained from the monthly reports.

According to the Monthly Motor Fuel Tax Reports, 439.3 million gallons of gasoline, 1,184.8 million gallons of E10 blend motor fuel, and 1.5 million gallons of E85 blend motor fuel were shipped from Iowa terminals to Iowa locations during 2009. In comparison, retailers reported having sold only 264.9 million gallons of gasoline, but 1,197.0 million gallons of E10 blend motor fuel and 5.9 million gallons of E85 blend motor fuel. The differences between the two sets of statistics may be largely attributed to the fact that some blending of ethanol blend fuels occurs between the terminals and retail locations.

Diesel Fuel Sales

During 2009, based on annual reports submitted to the Department, the amount of clear Biodiesel sold equaled 177.9 million gallons, or 36.7 percent of total clear diesel fuel sales. The total gallons of clear diesel fuel sold at retail accounted for by these reports equaled 484.6 million. In comparison, the number of taxable (clear) gallons of diesel fuel shipped from terminals during 2009 equaled 615.6 million. So, the Retailers Motor Fuel Gallons Annual Report for 2009 account for only about 78.7 percent of diesel fuel on which taxes were paid.

Also, during 2009, 158.8 million gallons of dyed (non-taxed) diesel fuel was sold by the reporting locations, and 27.3 million gallons (17.2%) of the dyed diesel consisted of a Biodiesel blend.

Based on the annual reports, 1,228 locations sold clear diesel fuel and 278 of these locations sold clear Biodiesel fuel during 2009. In addition, 345 locations sold dyed diesel fuel and 139 of these locations sold dyed Biodiesel fuel during 2009.

2007 and 2008 Retail Motor Fuel Sales Comparison

Table 2 presents a comparison of retail motor fuel sales for 2008 and 2009. The number of reporting locations decreased from 2,271 in 2008 to 2,270 in 2009. The number of locations that sold of non-ethanol blend gasoline decreased by 43 from 1,933 to 1,890 and the amount of non-ethanol blend gasoline sold decreased from 274.0 million gallons to 264.9 million gallons. The number of locations selling ethanol blend gasoline increased from 2,122 to 2,140, but the amount of ethanol blend gasoline sold decreased from 1,269.9 million gallons to 1,202.9 million gallons.

The largest change in motor fuel sales between 2008 and 2009 was for clear diesel sales. The 1,228 locations filing reports for 2009 reported sales of only 484.6 million gallons, whereas 1,198 locations reported sales of 611.8 million gallons for 2008.

Between 2008 and 2009 the number of locations selling clear biodiesel fuel increased from 225 to 278, but the amount of clear biodiesel sales decreased from 206.0 million gallons to 177.9 million gallons. For dyed biodiesel the number of locations increased from 104 to 139, and the amount of dyed biodiesel sold increased from 20.8 million gallons during 2008 to 27.3 million gallons during 2009.

Pure Biofuel Sales

The primary purpose of the Retailers Motor Fuels Gallons Report is to provide the information needed to determine the State's progress toward replacing 25 percent of petroleum based motor fuels with biofuels by the year 2020. Table 1 provides estimates of the share of each fuel type accounted for by pure biofuels.

For the purposes of measuring progress toward that goal the following computations were made to estimate the shares of each type of fuel sold comprised of pure biofuels:

- For E10 blend gasoline-type fuel the number of gallons was multiplied by 0.10
- For E85 blend gasoline-type fuel the number of gallons was multiplied by 0.79
- For B2 blend diesel fuel the number of gallons was multiplied by 0.02
- For B3 blend diesel fuel the number of gallons was multiplied by 0.03
- For B4 blend diesel fuel the number of gallons was multiplied by 0.04
- For B5 blend diesel fuel the number of gallons was multiplied by 0.05
- For B6 blend diesel fuel the number of gallons was multiplied by 0.06
- For B10 blend diesel fuel the number of gallons was multiplied by 0.10
- For B20 blend diesel fuel the number of gallons was multiplied by 0.20
- For other Biodiesel blends the number of gallons was multiplied by the average pure Biodiesel share for the other seven blends (for clear other Biodiesel: 0.0383 and for dyed other Biodiesel: 0.0265)

These calculations indicate that during 2009 pure ethanol comprised 8.5 percent of the volume of gasoline-type fuel sales. The pure biofuel share of diesel fuel sales equaled 3.7 percent. The share of all motor fuel sales reported by retail locations equaled 6.2 percent. However, the formula specified in H.F. 2754 used to determine progress toward meeting the 25 percent biofuels goal does not include diesel fuel sales in the denominator of the official progress measure. Rather this formula is:

Official Biofuels Share = (Pure Ethanol Gallons + Pure Biodiesel Gallons)/ Gasoline-Type Gallons

Using this formula, during 2009 biofuels accounted for 9.0 percent of Iowa retail motor fuel sales.

Table 1: Iowa Biofuel Sales 2009

Statewide Summary (as Filed)

Data Description	Locations	Gallons	Pure Biofuel Shares	
			Petroleum	Pure Biofuel
Gasoline (Non-Ethanol)	1,890	264,861,588	264,861,588	0
Ethanol				
E10 Ethanol	2,139	1,197,003,400	1,077,303,060	119,700,340
E85 Ethanol	144	5,853,716	1,229,280	4,624,436
<u>Total Ethanol Gallons</u>	<u>2,140</u>	<u>1,202,857,116</u>	<u>1,078,532,340</u>	<u>124,324,776</u>
Total Gasoline and Ethanol	2,235	1,467,718,704	1,343,393,928	124,324,776
Ethanol Share	95.7%	82.0%		8.5%
Diesel				
Clear Diesel	1,228	484,599,427	477,784,761	6,814,666
Dyed Diesel	345	158,828,465	158,104,233	724,232
<u>Total Diesel Gallons</u>	<u>1,262</u>	<u>643,427,892</u>	<u>635,888,994</u>	<u>7,538,898</u>
Clear Diesel Share	97.3%	75.3%		
Pure Biofuel Share				1.2%
Total Fuel All Types	2,270	2,111,146,596	1,979,282,922	131,863,674
Pure Biofuels Share				6.2%
Adjusted Share				9.0%
Biodiesel				
Clear Biodiesel				
B2 Clear	183	65,253,129	63,948,066	1,305,063
B3 Clear	7	13,873,609	13,457,401	416,208
B4 Clear	7	23,213,756	22,285,206	928,550
B5 Clear	54	55,713,775	52,928,086	2,785,689
B6 Clear	5	8,459,219	7,951,666	507,553
B10 Clear	12	6,785,784	6,107,206	678,578
B20 Clear	6	111,871	89,497	22,374
Other Clear	81	4,454,045	4,283,394	170,651
<u>Subtotal Clear Biodiesel</u>	<u>278</u>	<u>177,865,188</u>	<u>171,050,522</u>	<u>6,814,666</u>
Pure Biofuels Share				3.8%
Dyed Biodiesel				
B2 Dyed	93	18,173,754	17,810,279	363,475
B3 Dyed	0	0	0	0
B4 Dyed	0	0	0	0
B5 Dyed	49	3,314,967	3,149,219	165,748
B6 Dyed	0	0	0	0
B10 Dyed	14	343,452	309,107	34,345
B20 Dyed	11	86,928	69,542	17,386
Other Dyed	36	5,405,788	5,262,510	143,278
<u>Subtotal Dyed Biodiesel</u>	<u>139</u>	<u>27,324,889</u>	<u>26,600,657</u>	<u>724,232</u>
Pure Biofuels Share				2.7%
Total Biodiesel Gallons	325	205,190,077	197,651,179	7,538,898
Biodiesel Share	25.8%	31.9%		
Pure Biofuels Share				3.7%
Purchases B99 or B100				
Clear	0	0	0	0
Dyed	0	0	0	0
<u>Total B99 or B100 Gallons</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>

Table 2: 2008 and 2009 Iowa Biofuel Sales

Statewide Summary

Data Description	CY 2008		CY 2009		Change 2008 - 2009	
	Locations	Gallons	Locations	Gallons	Locations	Gallons
Gasoline (Non-Ethanol)	1,933	273,981,590	1,890	264,861,588	-43	-9,120,002
Ethanol						
E10 Ethanol	2,116	1,262,277,661	2,139	1,197,003,400	23	-65,274,261
E85 Ethanol	125	7,667,923	144	5,853,716	19	-1,814,207
Total Ethanol Gallons	2,122	1,269,945,584	2,140	1,202,857,116	18	-67,088,468
Total Gasoline and Ethanol	2,234	1,543,927,174	2,235	1,467,718,704	1	-76,208,470
Ethanol Share	95.0%	82.3%	95.7%	82.0%	0.8%	-0.3%
Diesel						
Clear Diesel	1,198	611,839,073	1,228	484,599,427	30	-127,239,646
Dyed Diesel	321	144,643,732	345	158,828,465	24	14,184,733
Total Diesel Gallons	1,227	756,482,805	1,262	643,427,892	35	-113,054,913
Clear Diesel Share	97.6%	80.9%	97.3%	75.3%	-0.3%	-5.6%
Total Fuel All Types	2,271	2,300,409,979	2,270	2,111,146,596	-1	-189,263,383
Biodiesel						
Clear Biodiesel						
B2 Clear	156	66,814,159	183	65,253,129	27	-1,561,030
B3 Clear	0	0	7	13,873,609	7	13,873,609
B4 Clear	0	0	7	23,213,756	7	23,213,756
B5 Clear	43	15,120,329	54	55,713,775	11	40,593,446
B6 Clear	0	0	5	8,459,219	5	8,459,219
B10 Clear	19	13,974,297	12	6,785,784	-7	-7,188,513
B20 Clear	11	648,927	6	111,871	-5	-537,056
Other Clear	57	109,462,646	81	4,454,045	24	-105,008,601
Subtotal Clear Biodiesel	225	206,020,358	278	177,865,188	53	-28,155,170
Biodiesel Dyed Biodiesel						
B2 Dyed	69	12,697,555	93	18,173,754	24	5,476,199
B3 Dyed	0	0	0	0	0	0
B4 Dyed	0	0	0	0	0	0
B5 Dyed	42	2,627,503	49	3,314,967	7	687,464
B6 Dyed	0	0	0	0	0	0
B10 Dyed	18	361,450	14	343,452	-4	-17,998
B20 Dyed	9	113,608	11	86,928	2	-26,680
Other Dyed	25	5,008,955	36	5,405,788	11	396,833
Subtotal Dyed Biodiesel	104	20,809,071	139	27,324,889	35	6,515,818
Total Biodiesel Gallons	263	226,829,429	325	205,190,077	62	-21,639,352
Biodiesel Share	21.4%	30.0%	25.8%	31.9%	4.3%	1.9%
Purchases B99 or B100						
Clear	39	864,076	0	0	-39	-864,076
Dyed	33	329,101	0	0	-33	-329,101
Total B99 or B100 Gallons	57	1,193,177	0	0	-57	-1,193,177